

09/234,847

Page 1

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L17 ANSWER 1 OF 8 USPATFULL
 ACCESSION NUMBER: 2002-266303 USPATFULL
 TITLE: 13-substituted methacycline compounds
 INVENTOR(S): Nelson, Mark L., Wellesley, MA, UNITED STATES
 Bhatia, Beena, Arlington, MA, UNITED STATES
 McIntyre, Laura, Arlington, MA, UNITED STATES
 Rennie, Glen, South Weymouth, MA, UNITED STATES

NUMBER KIND DATE
 PATENT INFORMATION: US 2002-147182 A1 20021010
 APPLICATION INFO.: US 2001-895796 A1 20010629 (9)

NUMBER DATE
 PRIORITY INFORMATION: US 2000-216580P 20000707 (60)
 US 1999-154701P 19990914 (60)
 US 2000-193972P 20000331 (60)
 US 2000-193879P 20000331 (60)
 US 2000-204158P 20000515 (60)
 US 2000-212030P 20000616 (60)
 US 2000-212471P 20000616 (60)

DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: Elizabeth A. Hanley, Esq., Lahive & Cockfield, LLP, 28 State Street, Boston, MA, 02109

NUMBER OF CLAIMS: 30
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1104

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

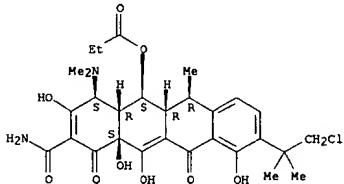
AB 13-substituted methacycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 13-substituted methacycline compounds are described.

IT 233586-00-0P (synthesis and antibacterial activity of tetracycline-type compds.)

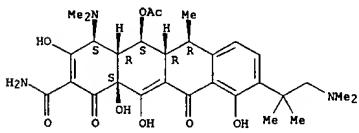
RN 233586-00-0 USPATFULL

CN 2-Naphthacencarboxamide, 9-(2-chloro-1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



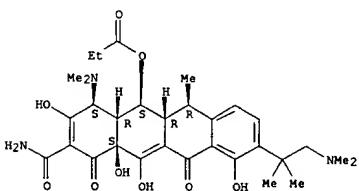
L17 ANSWER 1 OF 8 USPATFULL (Continued)



RN 233586-24-8 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

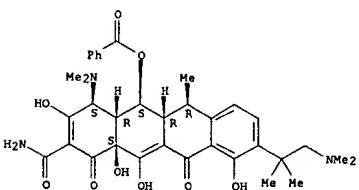
Absolute stereochemistry.



RN 233586-25-9 USPATFULL

CN 2-Naphthacencarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



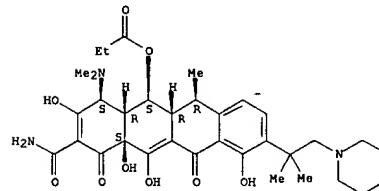
RN 233586-26-0 USPATFULL

CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-

L17 ANSWER 1 OF 8 USPATFULL (Continued)
 IT 233586-01-1P 233586-22-6P 233586-23-7P
 233586-24-8P 233586-25-9P 233586-26-0P
 233586-27-1P 233586-28-2P 233586-29-3P
 233586-30-6P 233586-31-7P

(synthesis and antibacterial activity of tetracycline-type compds.)
 RN 233586-01-1 USPATFULL
 CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-(1,1-dimethyl-1-(1-piperidinyl)ethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

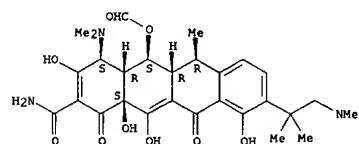
Absolute stereochemistry.



RN 233586-22-6 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

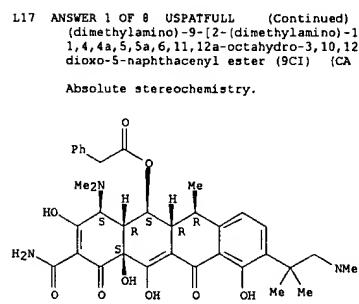
Absolute stereochemistry.



RN 233586-23-7 USPATFULL

CN 2-Naphthacencarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

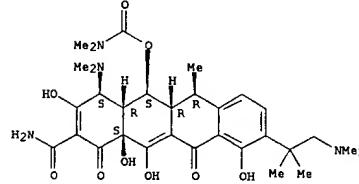
Absolute stereochemistry.



RN 233586-27-1 USPATFULL

CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

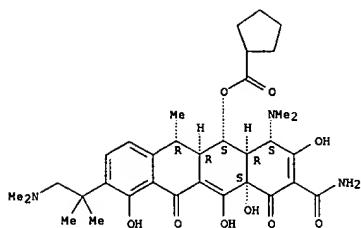


RN 233586-28-2 USPATFULL

CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

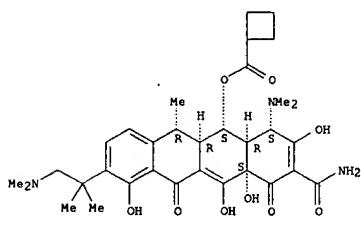
L17 ANSWER 1 OF 8 USPATFULL (Continued)



RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

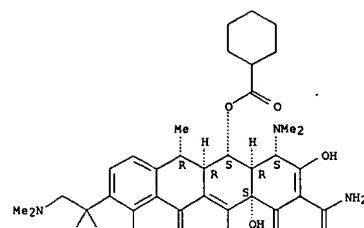


RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

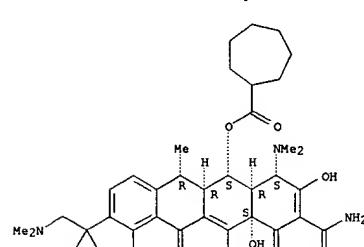
L17 ANSWER 1 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 2 OF 8 USPATFULL

ACCESSION NUMBER: 2002:243607 USPATFULL

TITLE: 7-phenyl-substituted tetracycline compounds
INVENTOR(S): Nelson, Mark L., Wellesley, MA, UNITED STATES
Rennie, Glen, South Weymouth, MA, UNITED STATES
Koza, Darrell, Westerly, RI, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2002132798 A1 20020919
APPLICATION INFO.: US 2001-882505 A1 20010615 (9)

NUMBER DATE

PRIORITY INFORMATION: WO 2000-US116632 20000616
US 2000-212470P 20000616 (60)DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: 31

EXEMPLARY CLAIM: 1

LINE COUNT: 1041

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB 7-phenyl-substituted tetracycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-phenyl-substituted tetracycline compounds are described.

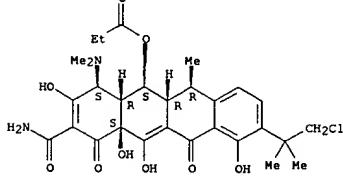
IT 233586-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-00-0 USPATFULL

CN 2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-7P
233586-24-8P 233586-25-9P 233586-26-0P
233586-27-1P 233586-28-2P 233586-29-3P
233586-30-4P 233586-31-7P

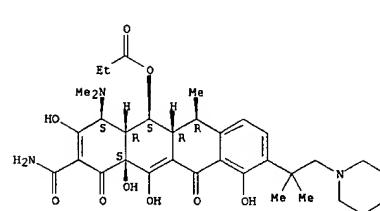
(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-01-1 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

L17 ANSWER 2 OF 8 USPATFULL (Continued)

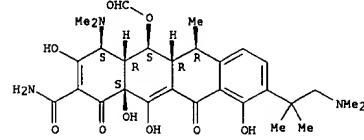
Absolute stereochemistry.



RN 233586-22-6 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

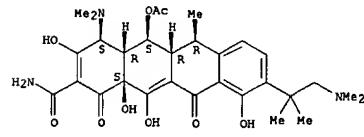
Absolute stereochemistry.



RN 233586-23-7 USPATFULL

CN 2-Naphthacenecarboxamide, 5-(acetyl oxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

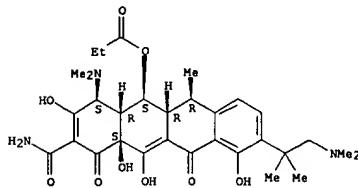


RN 233586-24-8 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-

L17 ANSWER 2 OF 8 USPATFULL (Continued)
 dimethylsulfonyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

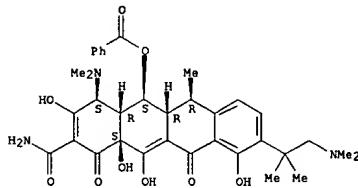
Absolute stereochemistry.



RN 233586-25-9 USPATFULL

CN 2-Naphthacencarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,4,4a,5,5a,6,11,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

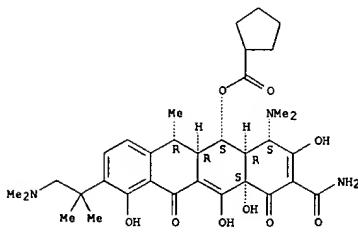


RN 233586-26-0 USPATFULL

CN Benzenoacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

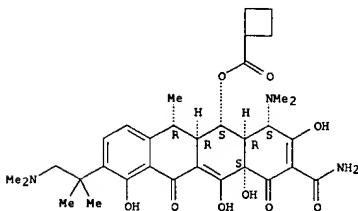
L17 ANSWER 2 OF 8 USPATFULL (Continued)



RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

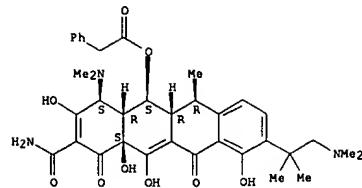


RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

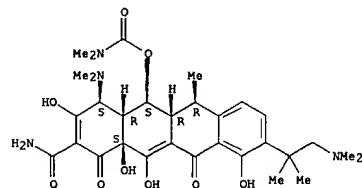
L17 ANSWER 2 OF 8 USPATFULL (Continued)



RN 233586-27-1 USPATFULL

CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

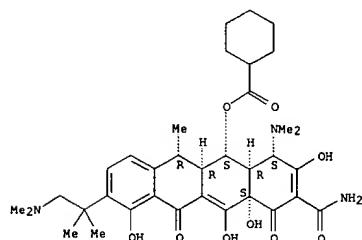


RN 233586-28-2 USPATFULL

CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

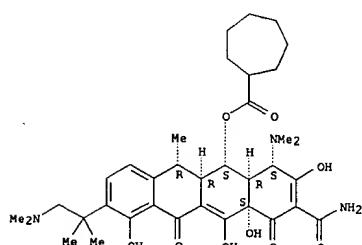
L17 ANSWER 2 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethyllethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 3 OF 8 USPATFULL
 ACCESSION NUMBER: 2002-236040 USPATFULL
 TITLE: 7-phenyl-substituted tetracycline compounds
 INVENTOR(S): Nelson, Mark L., Wellesley, MA, UNITED STATES
 Ismail, Mohamed Y., Bedford, MA, UNITED STATES

NUMBER KIND DATE
 PRIORITY INFORMATION: US 2002-128238 A1 20020912
 APPLICATION INFO.: US 2001-883137 A1 20010615 (9)

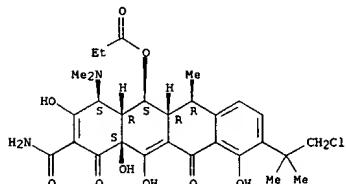
NUMBER DATE
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 DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
 NUMBER OF CLAIMS: 64
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1323

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB 7-phenyl-substituted tetracycline compounds which are substantially free of positional isomers, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-phenyl-substituted tetracycline compounds are described. 7-substituted tetracycline compounds which are substantially free of positional isomers, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-substituted tetracycline compounds are described.

IT 233586-00-0P (synthesis and antibacterial activity of tetracycline-type compds.)
 RN 233586-00-0 USPATFULL
 CN 2-Naphthacencarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 233586-01-1P 233586-22-6P 233586-23-7P
 233586-24-8P 233586-25-9P 233586-26-0P
 233586-27-1P 233586-28-2P 233586-29-3P

L17 ANSWER 3 OF 8 USPATFULL (Continued)

Chemical structure of 2-Naphthacencarboxamide, 4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

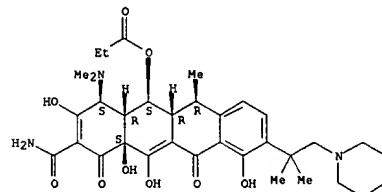
Chemical structure of 2-Naphthacencarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Chemical structure of Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-

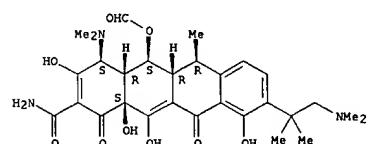
L17 ANSWER 3 OF 8 USPATFULL (Continued)
 233586-30-6P 233586-31-7P (synthesis and antibacterial activity of tetracycline-type compds.)
 RN 233586-01-1 USPATFULL
 CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-(1,1-dimethyl-2-(1-piperidinyl)ethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233586-22-6 USPATFULL
 CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

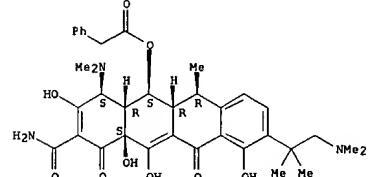


RN 233586-23-7 USPATFULL
 CN 2-Naphthacencarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

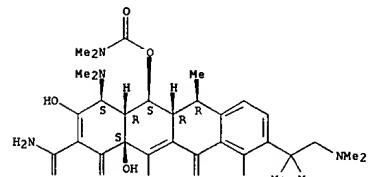
L17 ANSWER 3 OF 8 USPATFULL (Continued)
 (dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233586-27-1 USPATFULL
 CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

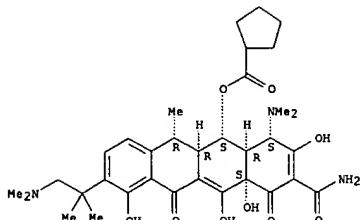
Absolute stereochemistry.



RN 233586-28-2 USPATFULL
 CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

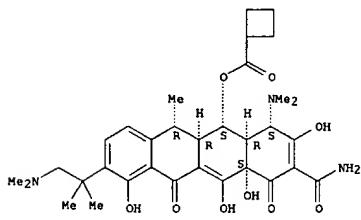
L17 ANSWER 3 OF 8 USPATFULL (Continued)



RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

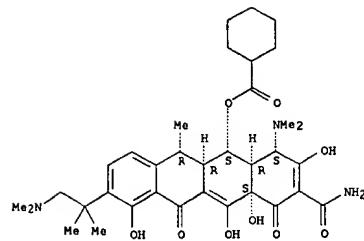


RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

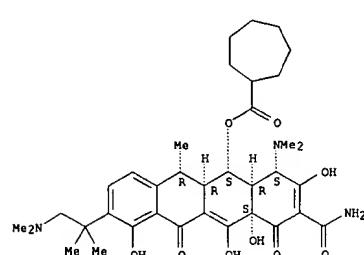
L17 ANSWER 3 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 4 OF 8 USPATFULL

ACCESSION NUMBER: 2002-236039 USPATFULL

TITLE: 7-N-substituted phenyl tetracycline compounds
INVENTOR(S): Nelson, Mark L., Wellesley, MA, UNITED STATES
Koza, Darrell, Westerly, RI, UNITED STATES

PATENT INFORMATION: NUMBER KIND DATE

APPLICATION INFO.: US 2002128237 A1 20020912
US 2001-882273 A1 20010615 (9)

NUMBER DATE

PRIORITY INFORMATION: WO 2000-US16672 20000616

US 2000-212139P 20000616 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: 48

EXEMPLARY CLAIM: 1

LINE COUNT: 1098

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB 7-substituted tetracycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-substituted tetracycline compounds are described.

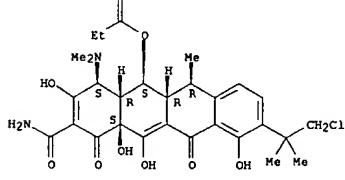
IT 233586-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-00-0 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-6P 233586-23-7P
233586-24-8P 233586-25-9P 233586-26-0P
233586-27-1P 233586-28-2P 233586-29-3P
233586-30-6P 233586-31-7P

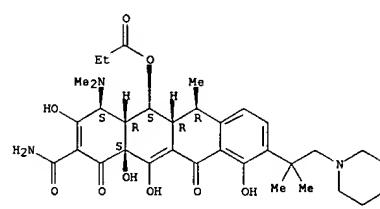
(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-01-1 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

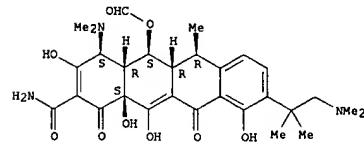
L17 ANSWER 4 OF 8 USPATFULL (Continued)



RN 233586-22-6 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

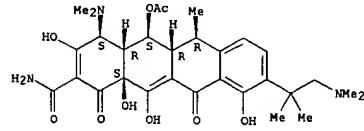
Absolute stereochemistry.



RN 233586-23-7 USPATFULL

CN 2-Naphthacenecarboxamide, 5-(acetyl oxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

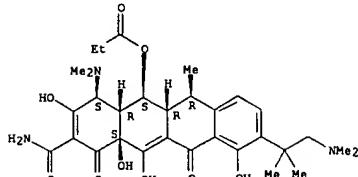


RN 233586-24-8 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

L17 ANSWER 4 OF 8 USPATFULL (Continued)
INDEX NAME

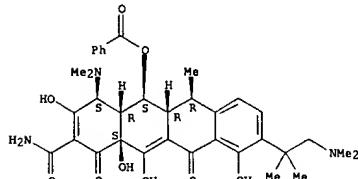
Absolute stereochemistry.



RN 233586-25-9 USPATFULL

CN 2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

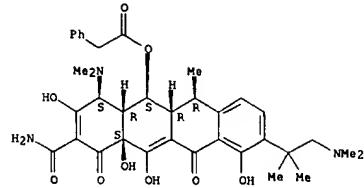


RN 233586-26-0 USPATFULL

CN Benzenoacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

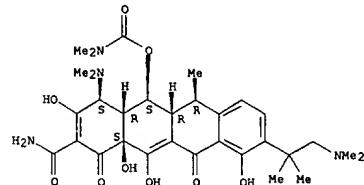
L17 ANSWER 4 OF 8 USPATFULL (Continued)



RN 233586-27-1 USPATFULL

CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[(2-(dimethylamino)-1,1-dimethylethyl)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

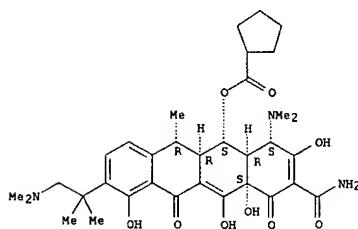


RN 233586-28-2 USPATFULL

CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[(2-(dimethylamino)-1,1-dimethylethyl)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 4 OF 8 USPATFULL (Continued)

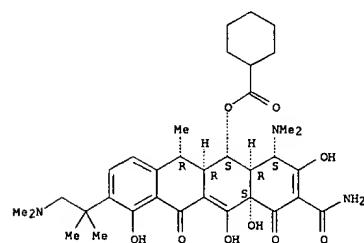


RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

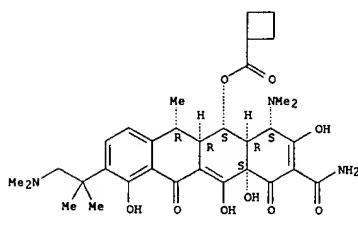
L17 ANSWER 4 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

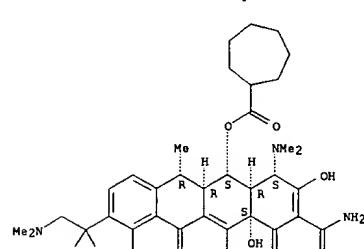
Absolute stereochemistry.



RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 5 OF 8 USPATFULL
 ACCESSION NUMBER: 2002-228474 USPATFULL
 TITLE: PHARMACEUTICALLY ACTIVE COMPOUNDS AND METHODS OF USE
 THEREOF
 INVENTOR(S): LEVY, STUART B., BOSTON, MA, UNITED STATES
 NELSON, MARK L., WELLESLEY, MA, UNITED STATES

NUMBER KIND DATE
 PATENT INFORMATION: US 2002123637 A1 20020905
 APPLICATION INFO.: US 1999-234847 A1 19990122 (9)

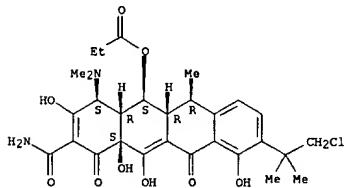
NUMBER DATE
 PRIORITY INFORMATION: US 1998-72262P 19980123 (60)
 DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
 NUMBER OF CLAIMS: 29
 EXEMPLARY CLAIM: 1
 LINE COUNT: 1568
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention includes new substituted tetracycline-type compounds that exhibit significant antibacterial activity, including against both gram-positive and gram-negative bacteria. It has been found that compounds of the invention are highly active against both gram positive and gram negative tetracycline sensitive and tetracycline resistant bacteria.

IT 233586-00-0P (synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-00-0 USPATFULL
 CN 2-Naphthacenecarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

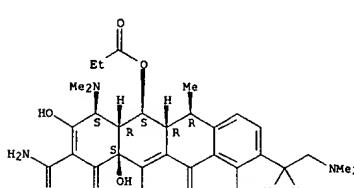


IT 233586-01-1P 233586-22-6P 233586-23-7P
 233586-24-8P 233586-25-9P 233586-26-0P
 233586-27-1P 233586-28-2P 233586-29-3P
 233586-30-6P 233586-31-7P
 (synthesis and antibacterial activity of tetracycline-type compds.)

L17 ANSWER 5 OF 8 USPATFULL (Continued)

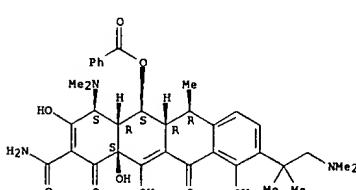
RN 233586-24-8 USPATFULL
 CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233586-25-9 USPATFULL
 CN 2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

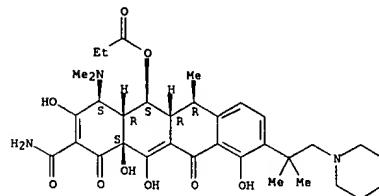


RN 233586-26-0 USPATFULL
 CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-

L17 ANSWER 5 OF 8 USPATFULL (Continued)

RN 233586-01-1 USPATFULL
 CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

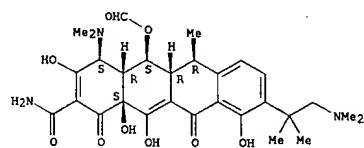
Absolute stereochemistry.



RN 233586-22-6 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233586-23-7 USPATFULL

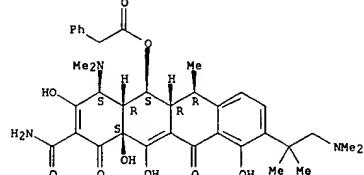
CN 2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 5 OF 8 USPATFULL (Continued)

(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

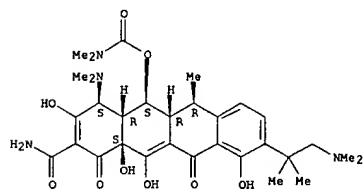
Absolute stereochemistry.



RN 233586-27-1 USPATFULL

CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

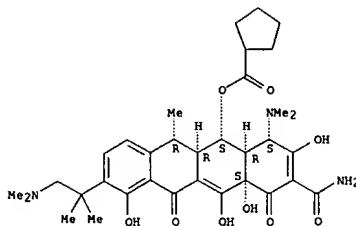


RN 233586-28-2 USPATFULL

CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

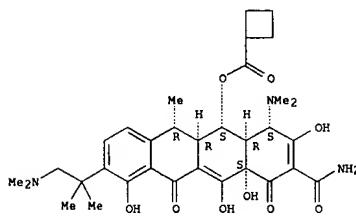
L17 ANSWER 5 OF 8 USPATFULL (Continued)



RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

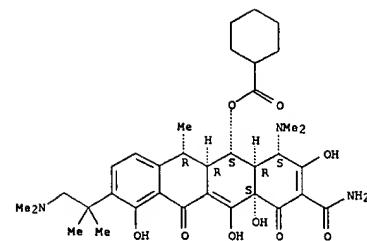


RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

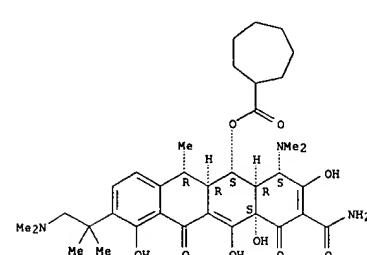
L17 ANSWER 5 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 6 OF 8 USPATFULL

ACCESSION NUMBER: 2002:214256 USPATFULL

TITLE: Tetracycline compounds for treatment of *Cryptosporidium parvum* related disordersINVENTOR(S): Levy, Stuart B., Boston, MA, UNITED STATES
Nelson, Mark L., Wellesley, MA, UNITED STATES

NUMBER KIND DATE

PATENT INFORMATION: US 2002115644 A1 20020822
APPLICATION INFO.: US 2001-768189 A1 20010123 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-178519P 20000124 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: 77

EXEMPLARY CLAIM: 1

LINE COUNT: 999

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods and compositions for treating *Cryptosporidium parvum* related disorders in a mammal are discussed. Several novel tetracycline compounds useful for treating *Cryptosporidium parvum* related disorders are also included.

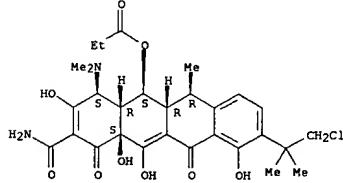
IT 233586-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-00-0 USPATFULL

CN 2-Naphthacencarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

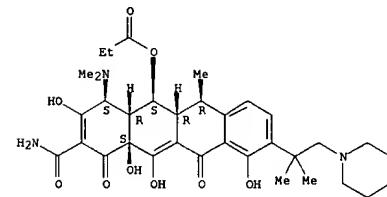
IT 233586-01-1 233586-22-6P 233586-23-7P
233586-24-8P 233586-25-9P 233586-26-0P
233586-27-1P 233586-28-2P 233586-29-3P

233586-30-6P 233586-31-7P

(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-01-1 USPATFULL

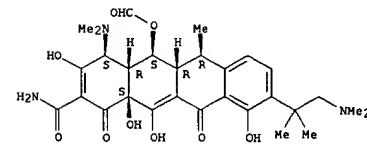
CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-(1,1-dimethyl-2-(1-piperidinyl)ethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

L17 ANSWER 6 OF 8 USPATFULL (Continued)
Absolute stereochemistry.

RN 233586-22-6 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

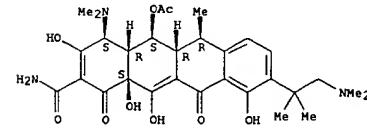
Absolute stereochemistry.



RN 233586-23-7 USPATFULL

CN 2-Naphthacencarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

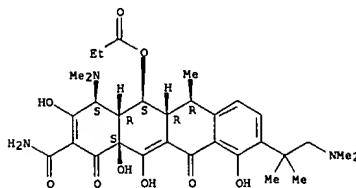


RN 233586-24-8 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-

L17 ANSWER 6 OF 8 USPATFULL (Continued)
 methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

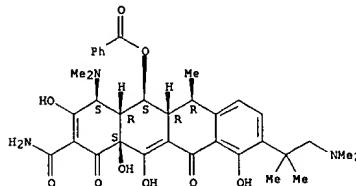
Absolute stereochemistry.



RN 233586-25-9 USPATFULL

CN 2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

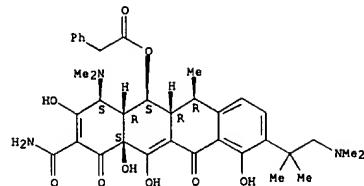


RN 233586-26-0 USPATFULL

CN Benzenoacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

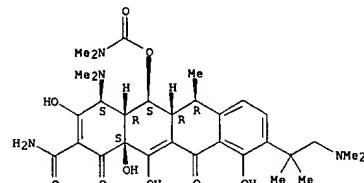
L17 ANSWER 6 OF 8 USPATFULL (Continued)



RN 233586-27-1 USPATFULL

CN Carboxamic acid, dimethyl-1, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

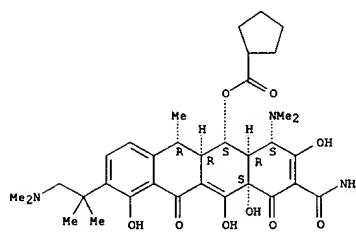


RN 233586-28-2 USPATFULL

CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 6 OF 8 USPATFULL (Continued)

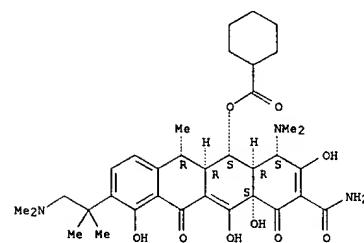


RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

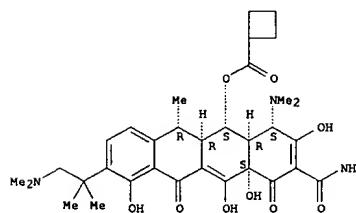
L17 ANSWER 6 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

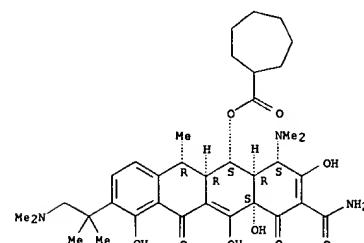
Absolute stereochemistry.



RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



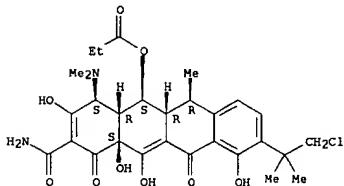
L17 ANSWER 7 OF 8 USPATFULL
 ACCESSION NUMBER: 2002-192100 USPATFULL
 TITLE: 7-and 9-carbamate, urea, thiourea, thiocarbamate, and heteroaryl-amino substituted tetracycline compounds
 INVENTOR(S): Nelson, Mark L., Wellesley, MA, UNITED STATES
 Levy, Stuart B., Boston, MA, UNITED STATES
 Frechette, Roger, Reading, MA, UNITED STATES
 Bowser, Todd E., Charlton, MA, UNITED STATES
 Ismail, Mohamed Y., Bedford, MA, UNITED STATES

NUMBER KIND DATE
 PATENT INFORMATION: US 2002103171 A1 20020801
 APPLICATION INFO.: US 2001-823884 A1 20010330 (9)

NUMBER DATE
 PRIORITY INFORMATION: US 2000-1939728 20000331 (60)
 US 2000-193879P 20000331 (60)
 US 2001-280367P 20010329 (60)
 DOCUMENT TYPE: Utility
 FILE SEGMENT: APPLICATION
 LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
 NUMBER OF CLAIMS: 102
 EXEMPLARY CLAIM: 1
 LINE COUNT: 2421
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Substituted tetracycline compounds, methods of synthesis, and methods of use are discussed. Tetracyclines useful for treating tetracycline related disorders are also discussed. Intermediates useful for synthesizing other tetracycline compounds are also included.
 IT 233586-00-0P (synthesis and antibacterial activity of tetracycline-type compds.)
 RN 233586-00-0 USPATFULL
 CN 2-Naphthacencarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

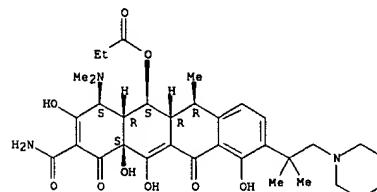
Absolute stereochemistry.



IT 233586-01-1P 233586-22-6P 233586-23-7P
 233586-24-8P 233586-25-9P 233586-26-0P

L17 ANSWER 7 OF 8 USPATFULL (Continued)
 233586-27-1P 233586-28-2P 233586-29-3P
 233586-30-6P 233586-31-7P
 (synthesis and antibacterial activity of tetracycline-type compds.)
 RN 233586-01-1 USPATFULL
 CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinyl)ethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

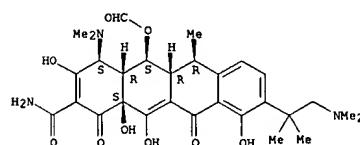
Absolute stereochemistry.



RN 233586-22-6 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233586-23-7 USPATFULL

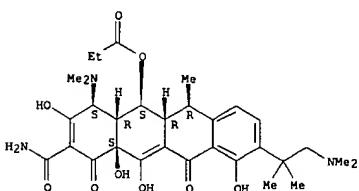
CN 2-Naphthacencarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L17 ANSWER 7 OF 8 USPATFULL (Continued)

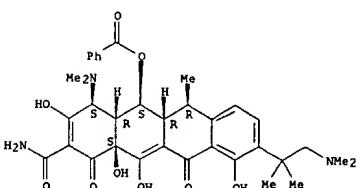
NUMBER DATE
 RN 233586-24-8 USPATFULL
 CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233586-25-9 USPATFULL
 CN 2-Naphthacencarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

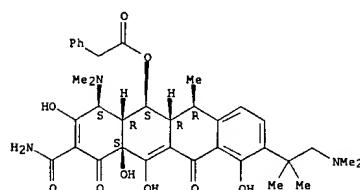
Absolute stereochemistry.



RN 233586-26-0 USPATFULL
 CN Benzenoacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-

L17 ANSWER 7 OF 8 USPATFULL (Continued)
 (dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacetyl ester (9CI) (CA INDEX NAME)

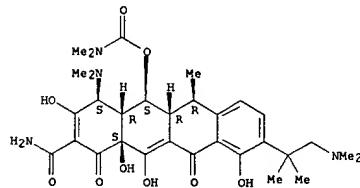
Absolute stereochemistry.



RN 233586-27-1 USPATFULL

CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacetyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

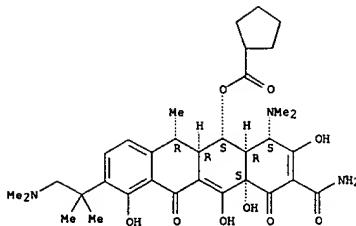


RN 233586-28-2 USPATFULL

CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacetyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

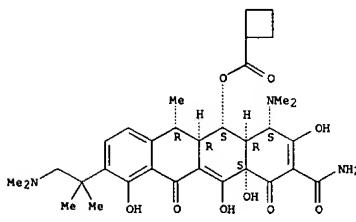
L17 ANSWER 7 OF 8 USPATFULL (Continued)



RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

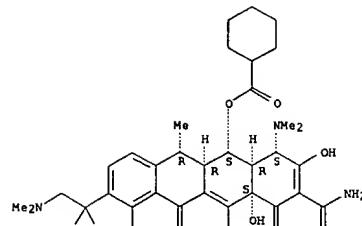


RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

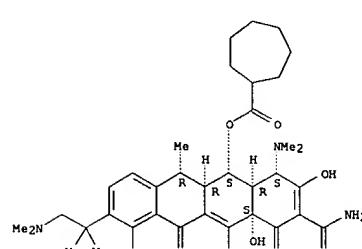
L17 ANSWER 7 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L17 ANSWER 8 OF 8 USPATFULL

ACCESSION NUMBER: 2002:85560 USPATFULL

TITLE: 7-substituted fused ring tetracycline compounds

INVENTOR(S): Nelson, Mark L., Wellesley, MA, UNITED STATES
McIntyre, Laura, Cambridge, MA, UNITED STATES

PATENT INFORMATION: NUMBER KIND DATE

APPLICATION INFO.: US 2002045602 A1 20020418
US 2001-852908 A1 20010510 (9)

NUMBER DATE

PRIORITY INFORMATION: US 2000-204158P 20000515 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1

LINE COUNT: 959

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB 7-substituted fused ring tetracycline compounds, methods of treating tetracycline responsive states, and pharmaceutical compositions containing the 7-substituted fused ring tetracycline compounds are described.

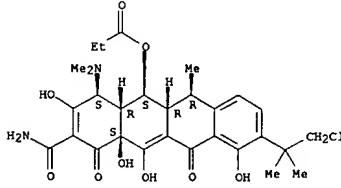
IT 233586-00-0P

(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-00-0 USPATFULL

CN 2-Naphthacencarboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 233586-01-1P 233586-22-5P 233586-23-7P
233586-24-8P 233586-25-9P 233586-26-0P
233586-27-1P 233586-28-2P 233586-29-3P
233586-30-6P 233586-31-7P

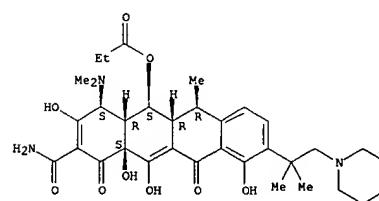
(synthesis and antibacterial activity of tetracycline-type compds.)

RN 233586-01-1 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-(1,1-dimethyl-2-(1-piperidinyl)ethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

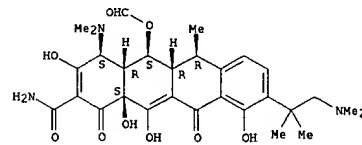
L17 ANSWER 8 OF 8 USPATFULL (Continued)



RN 233586-22-6 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)

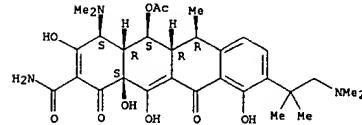
Absolute stereochemistry.



RN 233586-23-7 USPATFULL

CN 2-Naphthacencarboxamide, 5-(acetyl oxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

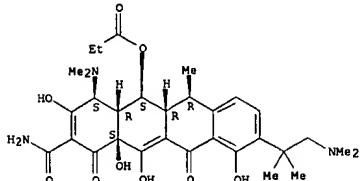


RN 233586-24-8 USPATFULL

CN 2-Naphthacencarboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)

L17 ANSWER 8 OF 8 USPATFULL (Continued)
INDEX NAME)

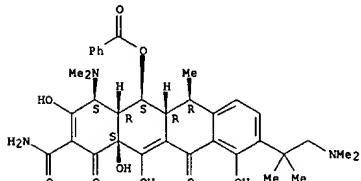
Absolute stereochemistry.



RN 233586-25-9 USPATFULL

CN 2-Naphthacencarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

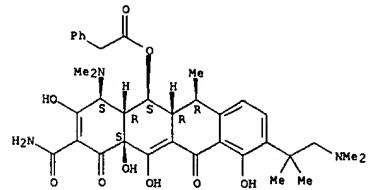


RN 233586-26-0 USPATFULL

CN Benzenoacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

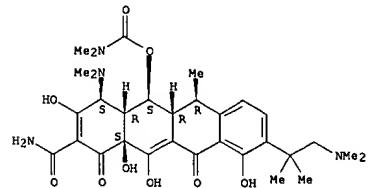
L17 ANSWER 8 OF 8 USPATFULL (Continued)



RN 233586-27-1 USPATFULL

CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

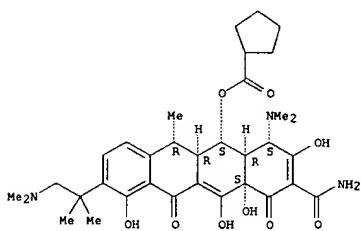


RN 233586-28-2 USPATFULL

CN Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

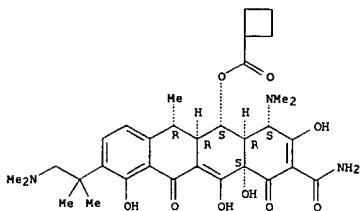
L17 ANSWER 8 OF 8 USPATFULL (Continued)



RN 233586-29-3 USPATFULL

CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

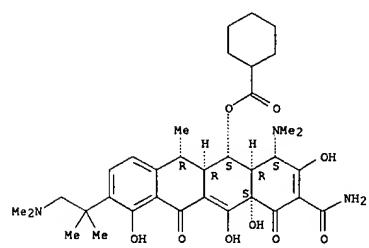


RN 233586-30-6 USPATFULL

CN Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

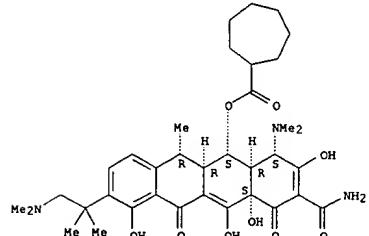
L17 ANSWER 8 OF 8 USPATFULL (Continued)



RN 233586-31-7 USPATFULL

CN Cycloheptanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthalenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



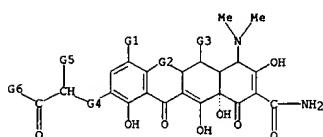
=> d ibib ab fqhit 1-3

L22 ANSWER 1 OF 3 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 137:232491 MARPAT
TITLE: Preparation of tetracycline derivatives and their use
as antibiotic agents
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1241160	A1	20020918	EP 2001-500065	20010313
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
WO 2002072545	A2	20020919	WO 2002-US7854	20020313
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EG, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LC, LK, LS, LT, LU, LV, MA, MD, MG, MX, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: EP 2001-500065 20010313
AB Tetracycline derivs., such as I [R = H, halogen, alkyl, NRaRb; R1, Ra, Rb = H, alkyl; R2 = H, O-alkyl, OH; R3 = H, OH; R1R2 = CH2; R4 = H, alkyl; R5 = H, alkyl, alkoxycarbonyl; X = NRaRb, O-alkyl optionally substituted by OH, OMe, halogen, amno, CF3; Rx, Ry = H, benzyl, cycloalkyl, alkenyl, alkynyl, alkyl optionally substituted by one or more groups selected from OH, OMe, halogen, NRaRb, CF3, alkylcycloalkyl, alkylheterocycle, alkylamino, alkylthio or together Rx and Ry form a heterocycle], pharmaceutically acceptable derivs. and solvates thereof, were prep'd. for the treatment of Gram-pos., Gram-neg. and community acquired infections. Growth-inhibitory activity of prep'd. tetracycline derivs. I was detd. against *Staphylococcus aureus*, *Enterococcus hirae*, *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Moraxella catarrhalis* and *Escherichia coli*. Thus, tetracycline deriv. (II) exhibited MIC value = 16 .mu.g/mL against *S. aureus* NR4250.

MSTR 1



L22 ANSWER 2 OF 3 MARPAT COPYRIGHT 2002 ACS
ACCESSION NUMBER: 135-288637 MARPAT

ACCESSION NUMBER: 135-288637 MARPAT
TITLE: Preparation of 7-and 9-carbamate, urea, thiourea, thiocarbamate, and heteroaryl-amin substituted tetracycline derivatives for pharmaceutical use as antibiotics
INVENTOR(S): Nelson, Mark L.; Levy, Stuart B.; Prechette, Roger; Bowers, Todd E.; Ismail, Mohamed Y.
PATENT ASSIGNEE(S): Trustees of Tufts College, USA
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXKD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074761	A1	20011011	WO 2001-US10342	20010331
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RW: GH, GM, KE, LS, MW, MD, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002103171	A1	20020801	US 2001-823884	20010330
US 2002128237	A1	20020912	US 2001-882273	20010615
US 2002147182	A1	20021010	US 2001-895796	20010629

PRIORITY APPN. INFO.: US 2000-1938799 20000331
 US 2000-1939729 20000331
 US 2001-2803679 20101329
 US 1999-1547019 19990914
 US 2000-2041583 20000515
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 WO 2000-US16672 20000616
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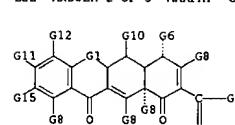
AB Tetracycline derivs., such as I (R5 = H, OH, acyloxy, etc.; R6 = H, Me, alkyl, etc.; R7, R9 = arylamino, urea, thiourea, carbamate, thiocarbamate, etc.; R8 = H, alkyl, alklenyl, alkynyl, aryl, alkoxy, alkylthio, etc.), were prep'd. for pharmaceutical use as antibiotics. Thus, doxycycline deriv. I (R5 = OH, R6 = Me, R7 = R8 = H, R9 = 1-naphthylamino) was prep'd. by nitration of doxycycline with potassium nitrate, Pd/C catalyzed hydrogenation of the nitrate to form 9-aminodoxycycline I (R5 = OH, R6 = Me, R7 = R8 = H, R9 = NH2) followed by formation of the desired urea by reaction of 9-aminodoxycycline with 1-naphthylisocyanate. The prep'd. tetracycline derivs. were tested for efficacy against common bacterial strains, such as *E. coli*, *S. aureus*, *E. hirae*, and *E. faecalis*.

L22 ANSWER 1 OF 3 MARPAT COPYRIGHT 2002 ACS (Continued)
G2 - 40

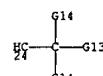


G3 = alkoxy<(1-6>
G4 = NH
MPL: claim 1
NTE: and pharmaceutically acceptable derivatives and solvate

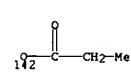
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT



G1 * 24



G2 = NH₂
 G6 = NMe₂
 G8 = OH



G16 - NH
DER: and pharmaceutically acceptable salts
MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT.

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(FILE 'HOME' ENTERED AT 12:02:01 ON 18 DEC 2002)

FILE 'REGISTRY' ENTERED AT 12:02:06 ON 18 DEC 2002

L1 STRUCTURE UPLOADED
 L2 13 S L1
 L3 354 S L1 FULL
 L4 STRUCTURE UPLOADED
 L5 13 S L4 FULL SUB=L3

FILE 'USPATFULL' ENTERED AT 12:04:26 ON 18 DEC 2002

L6 8 S L5

FILE 'CAPLUS' ENTERED AT 12:06:25 ON 18 DEC 2002

L7 6 S L5
 L8 0 S L7 NOT L6

FILE 'MARPAT' ENTERED AT 12:07:33 ON 18 DEC 2002

L9 11 S L5 FULL
 L10 10 S L9/COM

FILE 'REGISTRY' ENTERED AT 12:09:52 ON 18 DEC 2002

L11 STRUCTURE UPLOADED
 L12 13 S L11 FULL SUB=L3
 L13 0 S L12 NOT L5
 L14 STRUCTURE UPLOADED
 L15 31 S L14 FULL SUB=L3
 L16 18 S L15 NOT L12

FILE 'USPATFULL' ENTERED AT 12:12:36 ON 18 DEC 2002

L17 8 S L16
 L18 0 S L17 NOT PY>=1998

FILE 'CAPLUS' ENTERED AT 12:12:59 ON 18 DEC 2002

FILE 'USPATFULL' ENTERED AT 12:13:08 ON 18 DEC 2002

FILE 'CAPLUS' ENTERED AT 12:15:09 ON 18 DEC 2002

L19 7 S L16
 L20 0 S L19 NOT L17

FILE 'MARPAT' ENTERED AT 12:15:31 ON 18 DEC 2002

L21 14 S L15 FULL
 L22 3 S L21 NOT L9

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	SINCE FILE	TOTAL
	ENTRY	SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	64.78	489.17
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
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FILE 'REGISTRY' ENTERED AT 12:18:38 ON 18 DEC 2002

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STRUCTURE FILE UPDATES: 17 DEC 2002 HIGHEST RN 476608-54-5
DICTIONARY FILE UPDATES: 17 DEC 2002 HIGHEST RN 476608-54-5

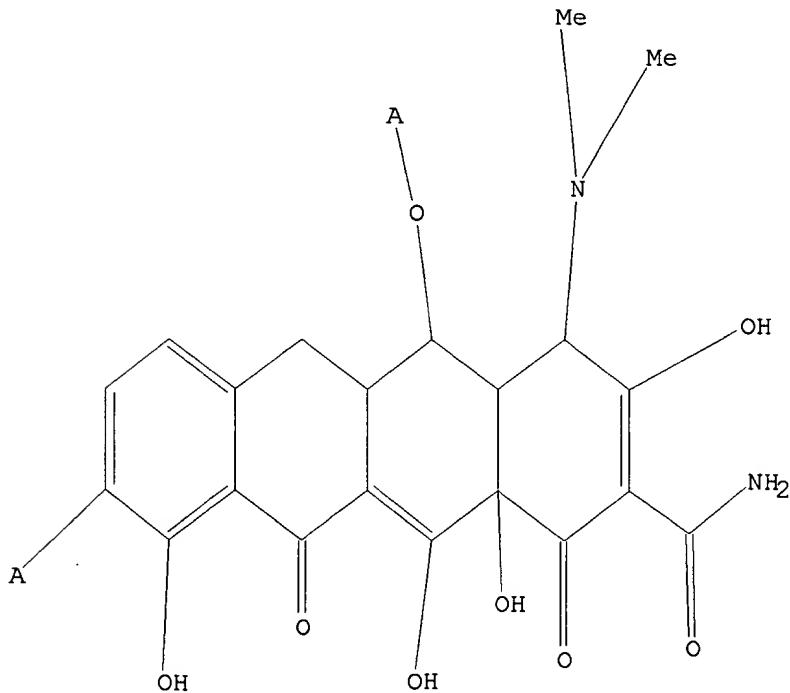
TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d 114
L14 HAS NO ANSWERS
L14 STR



Structure attributes must be viewed using STN Express query preparation.